

**Dr. Duke's Phytochemical and Ethnobotanical Database**

**Chemicals Found in Taraxacum officinale**

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	11,13-DIHYDROTARAXIN-ACID-BETA-D-GLUCOPYRANOSYL-ESTER	Plant	--	--		
0	11,13-DIHYDROTARAXIN-ACID-BETA-D-GLUCOPYRANOSYL-ESTER	Root	--	--		
0	11,13-DIHYDROTARAXINACETYL-1'-O-GLUCOSIDES	Plant	--	--		
0	14-TARAXEREN-3BETA-OL	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	2-CARBOXYARABINITOL	Leaf	--	356	0.2307361932056534	
0	29-NORCYCLOARTANOL	Pollen Or Spore	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	3,4-DIHYDROXYCINNAMIC-ACID	Plant	--	--		
0	3,4-DIHYDROXYCINNAMIC-ACID	Root	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	3,7-BETA-D-DIGLUCOSIDE-ISORHAMNETIN	Flower	--	--		
0	31-NORCYCLOARTENOL	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	31-NORDEHYDROLANASTEROL	Pollen Or Spore	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	4-ALPHA-11-BETA-13,15-TETRAHYDRORIDENTIN-B	Root	--	4000		
0	4-ALPHA-15,11-BETA-13-TETRAHYDRORIDENTIN-B	Root	--	--		
32	AESCULETIN	Flower	--	--		
0	ALPHA-AMYLASE	Plant	--	--		
0	ALPHA-LACTUCEROL	Latex Exudate	--	--		
32	ALPHA-TOCOPHEROL	Leaf	--	170	-0.5547164006283091	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
5	ALUMINUM	Root	94	656	0.03950108174380199	
0	ANDROSTEROL	Plant	--	--		
1	ANEURINE	Plant	--	--		
0	ANTHERAXANTHIN-ESTER	Flower	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	APIGENIN-7-GLUCOSIDE	Leaf	--	--		
0	APS-SULFOTRANSFERASE	Leaf	--	--		
0	ARABINOSE	Plant	--	--		
1	ARNIDIOL	Flower	--	--		
2	ARSENIC	Leaf	--	--		Chem. & Pharm. Bull. 38: 2205.
112	ASCORBIC-ACID	Leaf	18	6520	0.16105282120258035	
112	ASCORBIC-ACID	Root	54	376	-0.4310352549627957	
0	ASH	Leaf	18000	205000	1.5178274206549958	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	ASH	Root	11440	80000	0.35526479427075014	
0	ASPARAGINIC-ACID	Plant	--	--		
0	ASPARAGINIC-ACID	Leaf	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	BARIUM	Leaf	50	80	-0.8262649183332945	Chem. & Pharm. Bull. 38: 2205.
9	BETA-AMYRIN	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
9	BETA-AMYRIN	Flower	--	--		
53	BETA-CAROTENE	Flower	--	--		
53	BETA-CAROTENE	Leaf	40	583	1.4009946671295506	
53	BETA-CAROTENE	Root	12	84	0.10069386823526054	
0	BETA-D-FRUCTOPYRANOSIDES	Root	--	--		
0	BETA-FRUCTOFURANOSIDASES	Root	--	--		
0	BETA-FRUCTOPYRANOSIDASES	Root	--	--		
0	BETA-LACTUCEROL	Latex Exudate	--	--		
47	BETA-SITOSTEROL	Flower	--	--		
47	BETA-SITOSTEROL	Plant	--	--		
47	BETA-SITOSTEROL	Root	--	214	-0.27068071366460006	
3	BETA-SITOSTEROL-3-O-BETA-D-GLUCOPYRANOSIDE	Root	--	--		
0	BETA-SITOSTEROL-BETA-D-GLUCOPYRANOSIDE	Root	--	--		
0	BETA-SITOSTEROL-GLUCOSIDES	Plant	--	--		
4	BORON	Leaf	4	125	1.7366562696479586	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BROMINE	Leaf	30	80	0.7866803281462408	Chem. & Pharm. Bull. 38: 2205.
3	CADMIUM	Leaf	0.2	5	1.0824728791014093	
3	CADMIUM	Root	0.04	2.6	1.7629139450449156	
102	CAFFEIC-ACID	Plant	--	--		
102	CAFFEIC-ACID	Flower	--	--		
28	CALCIUM	Leaf	1870	13000	1.6258439789322057	
28	CALCIUM	Plant	12000	21000	0.7926875803133279	Chem. & Pharm. Bull. 38: 2205.
28	CALCIUM	Root	878	6140	-0.13829986219334658	
2	CAMPESTEROL	Leaf	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	CAOUTCHOUC	Plant	3000	3000	-0.8257102586581143	
0	CAOUTCHOUC	Latex Exudate	--	3000	-1.138622639854687	
3	CAPRIC-ACID	Pollen Or Spore	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CARBOHYDRATES	Leaf	37000	486000	0.2159161506572358	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	CARBOHYDRATES	Root	107107	749000	-1.0400752461191412	
0	CAROTENE	Plant	--	--		
0	CEROTIC-ACID	Root	--	--		
0	CERYL-ALCOHOL	Root	--	--		
0	CERYL-ALCOHOL	Latex Exudate	--	--		Perry, Lily M. 1980. Medicinal Plants of East and Southeast Asia. MIT Press. Cambridge, Massachusetts. 620 pp.
7	CHLORINE	Leaf	5300	22000	2.379246850295476	
77	CHLOROGENIC-ACID	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
20	CHOLINE	Root	390	1120	-0.280909507435247	
24	CHROMIUM	Leaf	0.2	50	3.6279964032474075	
24	CHROMIUM	Root	0.1	0.9	-0.3805576061834531	
0	CHRYSANTHEMAXANTHIN	Plant	--	--		
0	CHRYSANTHEMUMXANTHIN	Flower	--	--		
0	CIS-LUTEIN-5,6-EPOXIDE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CIS-TARAXANTHIN	Flower	--	--		
0	CLUYTIANOL	Root	--	--		
2	COBALT	Root	1	8	-0.3715682083878844	
12	COPPER	Leaf	4	12	0.5873423835723849	
12	COPPER	Root	3	28	1.8022668436014682	
13	COUMESTROL	Plant	--	--		
2	CRYPTOXANTHIN	Flower	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	CRYPTOXANTHIN-EPOXIDE	Flower	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	CRYPTOXANTHIN-EPOXIDE-ESTER	Flower	--	--		
0	CRYPTOXANTHIN-ESTER	Flower	--	--		
0	CYCLOARTANOL	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	CYCLOARTANOL	Pollen Or Spore	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
7	CYCLOARTENOL	Leaf	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
7	CYCLOARTENOL	Plant	--	--		
7	CYCLOARTENOL	Pollen Or Spore	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
3	CYNAROSIDE	Flower	--	--		
0	D-GLUCURONIC-ACID	Plant	--	--		
5	DAUCOSTEROL	Root	480	480	0.12645077462758925	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DODECADIENOIC-ACID	Pollen Or Spore	--	--		
0	EO	Root	715	5000	-0.41927924121066534	
0	EUDESMANOLIDES	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
2	FARADIOL	Plant	--	--		
2	FARADIOL	Flower	--	--		
0	FAT	Leaf	7000	48600	1.7244221632917907	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	FAT	Root	2288	16000	-0.2294322736898297	
61	FERULIC-ACID	Flower	--	--		
15	FIBER	Leaf	4000	111110	-0.43806976219057964	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	FIBER	Root	89000	89000	0.01972306003706211	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	FIBER(CRUDE)	Root	--	89000	-0.65885994844302	
0	FLAVOXANTHIN	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	FLAVOXANTHIN	Flower	--	--		
8	FRUCTOSE	Root	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	GERMACRANOLIDE	Plant	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
7	GLUCOSE	Root	5000	5000	-0.7978070163798161	Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
8	GLUTAMIC-ACID	Leaf	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
8	GLYCEROL	Latex Exudate	--	--		
0	HENEICOSAN-1-OIC-ACID	Pollen Or Spore	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	HEPTADECADIENOIC-ACID	Pollen Or Spore	--	--		
0	HEPTADECENOIC-ACID	Pollen Or Spore	--	--		
0	HEXADECADIENOIC-ACID	Pollen Or Spore	--	--		
0	HEXADECENOIC-ACID	Pollen Or Spore	--	--		
0	HOMOANDROSTEROL	Root	--	--		
0	HOMOTARAXASTEROL	Root	--	--		
8	INOSITOL	Root	--	--		
8	INOSITOL	Latex Exudate	--	--		
19	INULIN	Root	42900	300000	0.05809078622496001	
19	INULIN	Plant	--	--		
12	IODINE	Leaf	--	--		Chem. & Pharm. Bull. 38: 2205.
6	IRON	Leaf	31	215	1.3606856309173474	
6	IRON	Root	14	96	-0.3021853183050419	
22	ISOQUERCITRIN	Flower	--	--		
11	ISORHAMNETIN	Flower	--	--		
0	JASMONIC-ACID	Flower	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	JASMONIC-ACID	Bud	--	--		
0	KILOCALORIES	Leaf	440	3130	0.1804017187480344	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
0	KILOCALORIES	Root	2650	2650	-1.577890054797762	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	L-INOSITOL	Shoot	--	--		
0	LACTUCEROL	Plant	--	--		
7	LAURIC-ACID	Pollen Or Spore	--	--		
0	LEAD	Leaf	0.8	10	-0.4336719785177379	
0	LEAD	Plant	--	--		
0	LEAD	Root	0.1	13.6	2.753393095717452	
20	LECITHIN	Flower	29700	29700		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
20	LECITHIN	Root	--	--		
0	LEVULIN	Plant	--	--		
0	LEVULIN	Root	--	187000		
1	LEVULOSE	Plant	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
27	LINOLEIC-ACID	Pollen Or Spore	--	--		
27	LINOLEIC-ACID	Root	--	--		
0	LINOLENIC-ACID	Pollen Or Spore	--	--		
0	LINOLENIC-ACID	Root	--	--		
15	LUTEIN	Flower	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	LUTEIN-EPOXIDE	Flower	--	--		
0	LUTEIN-EPOXIDE	Plant	--	--		
0	LUTEIN-EPOXIDE-ESTER	Flower	--	--		
0	LUTEIN-ESTER	Flower	--	--		
78	LUTEOLIN	Flower	--	--		
0	LUTEOLIN-3'-O-BETA-D-GLUCOSIDE	Flower	--	--		
0	LUTEOLIN-4'-O-BETA-D-GLUCOSIDE	Flower	--	--		
7	LUTEOLIN-7-GLUCOSIDE	Leaf	--	--		
0	LUTEOLIN-7-O-GENTIOBIOSIDE	Flower	--	--		
0	LUTEOLIN-7-O-RHAMNOGLUCOSIDE	Flower	--	--		
65	MAGNESIUM	Leaf	360	2500	-0.6277550204208067	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
65	MAGNESIUM	Root	225	1570	-0.5276062015707126	
14	MANGANESE	Plant	100	130	0.23682926226746964	
14	MANGANESE	Leaf	14	130	-0.1174194411964242	
14	MANGANESE	Root	1	6.8	-0.4646750389625507	
18	MANNITOL	Root	--	--		
0	MARGARIC-ACID	Pollen Or Spore	--	--		
0	MELISSIC-ACID	Root	--	--		
2	MOLYBDENUM	Plant	--	--		Chem. & Pharm. Bull. 38: 2205.
3	MUCILAGE	Root	11000	85000	-0.5660471669302359	
6	MYRISTIC-ACID	Pollen Or Spore	--	--		
1	MYRISTOLEIC-ACID	Pollen Or Spore	--	--		
0	NEOXANTHIN-ESTER	Flower	--	--		
39	NIACIN	Root	4.7	33.1	-0.4967243334991701	
39	NIACIN	Leaf	8	71	-0.32234447241033354	
3	NICKEL	Leaf	0.4	5.6	-0.3163758105813781	
3	NICKEL	Plant	--	--		
3	NICKEL	Root	0.3	5.6	1.9774503536381358	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
11	NICOTINIC-ACID	Root	--	--		
0	NONADECANOIC-ACID	Pollen Or Spore	--	--		
18	OLEIC-ACID	Pollen Or Spore	--	--		
18	OLEIC-ACID	Root	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
9	OXALIC-ACID	Leaf	--	1700	-0.42631261700793327	Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
25	P-COUMARIC-ACID	Flower	--	--		
25	P-COUMARIC-ACID	Plant	--	--		
0	P-HYDROXYPHENYLACETIC-ACID	Plant	--	--		
0	P-HYDROXYPHENYLACETIC-ACID	Shoot	--	10		
0	P-HYDROXYPHENYLACETIC-ACID	Root	--	--		
13	PALMITIC-ACID	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	PALMITIC-ACID	Pollen Or Spore	--	--		
24	PECTIN	Root	17160	120000	-0.14497379746592196	
0	PECTINS	Root	78000	78000		
1	PENTADECANOIC-ACID	Pollen Or Spore	--	--		
0	PHLOBAPHENE	Root	--	--		
4	PHOSPHORUS	Root	518	3620	0.01796753238811398	
4	PHOSPHORUS	Leaf	590	4583	0.054560501723326035	
2	PHYTOSTEROLS	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.
0	POLLINASTANOL	Plant	--	--		
0	POLLINASTANOL	Pollen Or Spore	--	--		
14	POTASSIUM	Leaf	3970	27569	-0.01519366768525743	
14	POTASSIUM	Root	1716	12000	-0.2766954649326155	
0	PROTEIN	Leaf	27000	187500	1.088926100722295	
0	PROTEIN	Root	23595	165000	0.5231472238334102	
43	PROTOCATECHUIC-ACID	Flower	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PSEUDOTARAXASTEROL	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	PSEUDOTARAXASTEROL	Root	--	--		
0	PSEUDOTARAXASTEROL-ACETATE	Root	--	280		
0	PSI-TARAXASTEROL	Root	--	--		
0	PSI-TARAXASTEROL-ACETATE	Root	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	PSI-TARAXEROL	Root	--	--		
176	QUERCETIN	Flower	--	--		
6	QUERCIMERITRIN	Flower	--	--		
0	RESIN	Root	--	--		
15	RIBOFLAVIN	Leaf	1	18	-0.09348678211643267	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses
15	RIBOFLAVIN	Root	0.3	2.1	-0.4321138905848174	
0	RUBBER	Root	1300	1950	1.6889299554768	
0	RUBIDIUM	Plant	19	50	2.2655367486967726	Chem. & Pharm. Bull. 38: 2205.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	SACCHAROSE	Root	11000	11000		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
0	SAPONIN	Plant	--	--		
44	SCOPOLETIN	Flower	--	--		
60	SELENIUM	Root	0.1	0.9	-0.29843000767864497	
4	SILICON	Root	0.7	4.7	-0.3213144079930342	
0	SITOSTEROL	Leaf	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
1	SODIUM	Root	162	1130	0.013372462792456278	
1	SODIUM	Leaf	760	5278	0.2940315620523972	
8	STEARIC-ACID	Pollen Or Spore	--	--		
12	STIGMASTEROL	Root	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	STIGMASTEROL	Leaf	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
0	STRONTIUM	Plant	64	120	-0.2098574913290402	Chem. & Pharm. Bull. 38: 2205.
14	SUCROSE	Plant	--	--		
14	SUCROSE	Root	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	SUGARS	Root	14300	100000	-0.03757564189391796	
14	SULFUR	Plant	2600	3300	-0.2375519291864939	Chem. & Pharm. Bull. 38: 2205.
35	TANNIN	Root	--	--		
0	TARAXACERINE	Root	--	--		
0	TARAXACIN	Root	--	--		
0	TARAXACINE	Root	--	--		
0	TARAXACOLIDE-1'-O-BETA-D-GLUCOPYRANOSIDE	Root	--	--		
0	TARAXACOLIDE-1'-O-BETA-D-GLUCOSIDE	Root	--	60		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TARAXACOLIDE-1'-O-GLUCOSIDES	Plant	--	--		
0	TARAXACOSIDE	Plant	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
0	TARAXACOSIDE	Root	--	160		
0	TARAXACUM-OFFICINALE-GLYCOSIDE-TA-1	Flower	--	--		
0	TARAXACUM-OFFICINALE-GLYCOSIDE-TA-2	Flower	--	--		
0	TARAXACUM-OFFICINALE-GLYCOSIDE-TA-3	Flower	--	--		
0	TARAXANTHIN	Plant	--	--		
2	TARAXASTEROL	Flower	--	--		
2	TARAXASTEROL	Root	--	--		
2	TARAXASTEROL	Latex Exudate	--	--		
2	TARAXEROL	Root	--	--		
0	TARAXIEN	Flower	--	350		
0	TARAXIN	Plant	--	--		Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. Herbal Medicine - A Guide for Health-care Professionals. The Pharmaceutical Press, London. 296pp.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TARAXIN-ACID	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	TARAXIN-ACID-BETA-D-GLUCOPYRANOSYL-ESTER	Plant	--	--		J.S. Glasby Dict.Pls Containing 2ndary Metabolite. 1991.
0	TARAXINACETYL-1'-O-GLUCOSIDES	Plant	--	--		
1	TARAXINIC-ACID-1'-O-BETA-D-GLUCOPYRANOSIDE	Flower	--	--		
1	TARAXINIC-ACID-1'-O-BETA-D-GLUCOPYRANOSIDE	Leaf	--	--		Hansel, R., Keller, K., Rimpler, H., and Schneider, G. eds. 1992. Hager's Handbuch der Pharmazeutischen Praxis, Drogen (A-D), 1209 pp., 1993 (E-O), 970 pp., 1994 (P-Z), 1196 pp. Springer-Verlag, Berlin.
1	TARAXINIC-ACID-1'-O-BETA-D-GLUCOPYRANOSIDE	Root	--	--		
0	TARAXINOIC-ACID-1'-O-BETA-D-GLUCOSIDE	Shoot	--	--		
0	TARAXINOIC-ACID-1'-O-BETA-D-GLUCOSIDE	Root	--	102		
0	TARAXOL	Root	--	--		
6	TARTARIC-ACID	Root	--	--		
6	TARTARIC-ACID	Plant	--	--		
31	THIAMIN	Leaf	1	13	1.8121416088410889	CRC Handbook of Medicinal Herbs and/or CRC Handbook of Proximate Analyses

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
31	THIAMIN	Root	--	--		Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	THIAMINE	Root	--	--		
4	TIN	Root	2	13	-0.35437186016542255	
0	TITANIUM	Plant	58	330	1.6469635463189243	Chem. & Pharm. Bull. 38: 2205.
0	TRANS-LUTEIN-5,6-EPOXIDE	Plant	--	--		
0	TRANS-TARAXANTHIN	Flower	--	--		
1	TYROSINASE	Root	--	--		
24	VANILLIC-ACID	Flower	--	--		
2	VIOLAXANTHIN	Flower	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
0	VIOLAXANTHIN-ESTER	Flower	--	--		
0	VIOLAXANTHIN-LINEOLEATE-LINOLENATE	Pollen Or Spore	--	--		
0	VIT-D	Plant	--	--		Madaus, G. 1976. Lehrbuch der Biologischen Hilfsmittel. Vol., 1-3. 2862 pp. (+ 144 p. index). Georg Olms Verlag, Hildesheim. Reprint of 1938 Madaus.

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	WATER	Leaf	356000	880000	0.3610143077732886	
0	WATER	Root	--	857000	0.5743795854226849	
3	XANTHOPHYLL	Plant	--	--		
3	XYLOSE	Plant	--	--		
0	ZEAXANTHIN-ESTER	Flower	--	--		
77	ZINC	Leaf	21	230	0.8847458901948265	
77	ZINC	Root	0.2	1.3	-1.0020091531784148	